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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,088	09/30/2003	Jung-Seon Park	CU-3336 VE	4762

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EXAMINER	
KARLS, SHAY LYNN	
ART UNIT	**PAPER NUMBER**
1744	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/675,088	PARK ET AL.	
	Examiner	Art Unit	
	Shay L. Karls	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/24/03, 12/3/04, 4/1/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first guiding member shaped as a concave groove and the second guiding member shaped as a convex protrusion (claim 14) must be shown. Also, with regards to claim 17, the seating guide as a concave groove and the lower part of main body shaped as a convex protrusion must be shown. Lastly, claim 22 includes the limitations for a first fixing portion shaped as a convex protrusion and the second fixing portion shaped as a concave groove, however none of these features were shown. These features listed above must be shown in the drawings or the features must be canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 12 and 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4 and 5 of copending Application No. 10/851245.

Although the conflicting claims are not identical, they are not patentably distinct from each other because, with regards to claim 1, '245 teaches a nozzle (base, claim 1) for drawing in contaminates. There is a main body (vacuum cleaner body, claim 4) including a body frame

(exterior of vacuum cleaner body), a dust collector (dust collecting device, claim 4) and a drive motor (vacuum generator, claim 4). There is a frame assembly (handle assembly, claim 1) including a frame body (exterior of handle assembly) and a connecting portion (base frame, claim 5) for connecting to the base to allow the frame assembly to pivot with respect to the nozzle (claim 1 and 5). With regards to claim 3, the vacuum cleaner further comprises a support (receiving platform, claim 5) for supporting the main body. With regards to claim 12, there is a first guide member (central frame, claim 5) on the connecting portion (base frame, claim 5) and having a second guiding member (central opening, claim 5) corresponding to the first guide member is formed on the main body (vacuum cleaner body, claim 4). With regards to claim 15, there is a seating guide (central frame, claim 5) on the connecting portion (base frame, claim 5) corresponding to the lower part (central opening, claim 5) of the main body (vacuum cleaner body, claim 4)

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3-10 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7 and 10-16 of copending Application No. 10/674187.

Although the conflicting claims are not identical, they are not patentably distinct from each other because '187 fully encompasses all the limitations of the present invention. The same terminology is used for each element in both applications and therefore, each claim of the present invention will be matched up with a claim in '187, rather than matching up identical limitations in both applications. Claim 1 and 16 of '187 encompasses claims 1 and 6. Claim 2 and 3 of

'187 reads on claim 8. Claim 4 and 5 of '187 read on claim 7. Claim 7 of '187 encompasses claim 10. Claim 10 of '187 reads on 19, while claim 11 and 12 of '187 read on claim 3 and 4 respectively. Claim 13 of '187 reads on claim 9 and claim 14 and 15 of '187 read on 5 and 7 respectively.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-7, 10-13, 15-16, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Weaver et al. (USPN 5524321).

Weaver teaches a nozzle assembly (16) for drawing in air having dust and dirt. There is a main body (14) including a body frame (50, 52, 54, 56), a dust collector (130) connected to the body frame and a drive motor (166). There is a frame assembly (18) including a frame body (18) and a connecting portion (200) formed with a lower part of the frame body. The frame assembly and the nozzle are pivotally connected (col. 5, lines 15-21).

With regards to claim 3, the frame assembly further comprises a support (202) for supporting the main body.

With regards to claim 4, the frame assembly further comprises a connecting guide for removable connecting accessories to the vacuum cleaner (206).

With regards to claim 5, the frame body further comprises a wheel (238, 240) connected to the lower part of the frame assembly.

With regards to claim 6, the main body of the vacuum is connected to the dust collector (figure 5) and further comprises a dust receptacle (139) removable connected to the body frame for collecting dust and dirt. There is a button formed at an upper part of the body frame (184).

With regards to claim 7, the frame assembly further comprises a frame handle (86) disposed at an upper part thereof, and a there is a handle groove (68) disposed at a position corresponding to the button of the main body of the vacuum cleaner.

With regards to claim 10, the connecting portion comprises a communication hole (210) through which the air drawn in through the nozzle assembly is directed to the main body of the vacuum and a communicating member (94) connected to the communicating hole is formed at the main body of the vacuum.

With regards to claim 11, there is a power port (216) on one side of the connecting portion for providing power from the main body and a power connector (218) disposed on the lower part of the main body to be connected to the power port.

With regards to claim 12, there is a first guiding member (204) on the connecting portion and a second guiding member (74) corresponding to the first guiding member on the lower part of the main body.

With regards to claim 13, the first guiding member is shaped in to a convex protrusion (cross section of 204 would show a convex shape) and the second guiding member is shaped in to a concave groove (cross section of 74 would show a concave groove).

With regards to claim 15, there is a seating guide (204) on the connecting portion corresponding to the lower part (74) of the main body of the vacuum cleaner.

With regards to claim 16, the seating guide is shaped as a convex protrusion (cross section of 204 would show a convex shape) and the lower part of the main body is shaped as a concave groove (cross section of 74 would show a concave groove).

With regards to claim 18, the connecting portion includes a shaft member (230, 232) extending downwardly for pivotally connecting the shaft member with the nozzle. The shaft is received in recesses (264, 266) for pivoting.

With regards to claim 19, there is an on/off switch (62) disposed at a front part of the main body.

With regards to claim 20, there is a first fixing portion (250) formed at the upper part of the nozzle assembly and a second fixing portion (lower surface of 200) for corresponding to the first fixing portion to provide a connection between the connecting portion and the frame assembly.

Claims 1-7, 10-13, 15-16, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Best et al. (PGPub 20040216263).

Best teaches a nozzle assembly (14) for drawing in air having dust and dirt. There is a main body (16) including a body frame (46), a dust collector (50) connected to the body frame and a drive motor (68). There is a frame assembly (12) including a frame body (20) and a

connecting portion (24) formed with a lower part of the frame body. The frame assembly and the nozzle are pivotally connected (paragraph 0007).

With regards to claim 2, frame body further comprises a front casing facing forward with respect to the vacuum cleaner and a rear casing coupled to the front casing (figure 1 shows that the frame body (2) is divided into two parts by the vertical line drawn symmetrically through the frame body. The frame body being shaped to correspond to an outer circumference of the main body (figure 1 and 2).

With regards to claim 3, the frame assembly further comprises a support (top surface of 24) for supporting the main body.

With regards to claim 4, the frame assembly further comprises a connecting guide for removable connecting accessories to the vacuum cleaner (22; figure 2).

With regards to claim 5, the frame body further comprises a wheel (32) connected to the lower part of the frame assembly.

With regards to claim 6, the main body of the vacuum is connected to the dust collector (figure 1) and further comprises a dust receptacle (50) removable connected to the body frame for collecting dust and dirt. There is a button formed at an upper part of the body frame (on/off switch; paragraph 0024).

With regards to claim 7, the frame assembly further comprises a frame handle (18) disposed at an upper part thereof, and a there is a handle groove (62) disposed at a position corresponding to the button of the main body of the vacuum cleaner.

With regards to claim 10, the connecting portion comprises a communication hole (not labeled, see figure 6, what 94 connects to) through which the air drawn in through the nozzle

assembly is directed to the main body of the vacuum and a communicating member (94) connected to the communicating hole is formed at the main body of the vacuum (see figure below)

With regards to claim 11, there is a power port on one side of the connecting portion for providing power from the main body and a power connector disposed on the lower part of the main body to be connected to the power port (not labeled but shown on figure 6 to the left of the communication hole) (see figure below).

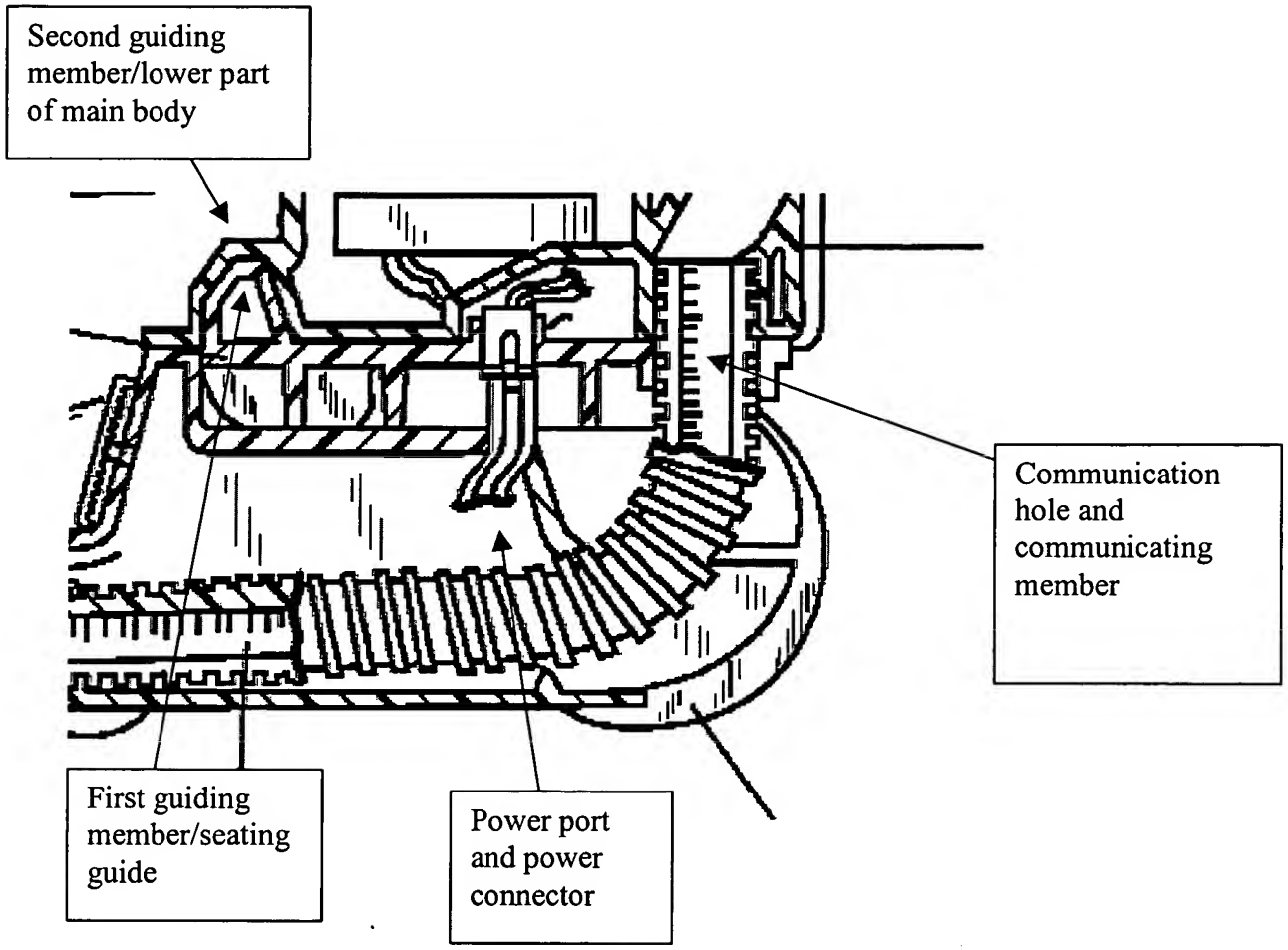
With regards to claim 12, there is a first guiding member on the connecting portion and a second guiding member corresponding to the first guiding member on the lower part of the main body (see figure below).

With regards to claim 13, the first guiding member is shaped in to a convex protrusion (cross section shows a convex shape in figure below) and the second guiding member is shaped in to a concave groove (cross section shows a concave groove in figure below).

With regards to claim 15, there is a seating guide on the connecting portion corresponding to the lower part of the main body of the vacuum cleaner (see figure below).

With regards to claim 16, the seating guide is shaped as a convex protrusion (cross section shows a convex shape in figure below) and the lower part of the main body is shaped as a concave groove (cross section shows a concave groove in figure below).

With regards to claim 19, there is an on/off switch (paragraph 0024) disposed at a front part of the main body.



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver ('321) or Best ('263).

Weaver or Best teach all the essential elements of the claimed invention however fail to teach that the first guiding member/seating guide is shaped as a concave groove and that the second guiding member/lower part of the main body is shaped as a convex protrusion. The references teach the first guiding member/seating guide is shaped as a convex groove and that the second guiding member/lower part of the main body is shaped as a concave protrusion. It would have been obvious at the time the invention was made to modify Weaver or Best so that the first guiding member/seating guide is shaped as a concave groove rather than a convex protrusion and that the second guiding member/lower part of the main body is shaped as a convex protrusion rather than a concave groove since reversing parts is a modification that has been considered to be within the level of ordinary skill in the art. *In re Gazda 104 USPQ 400, 402.*

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver ('321).

Weaver teaches all the essential elements of the claimed invention including a first fixing portion formed at the upper part of the nozzle (250) and a second fixing portion formed at the lower part of the frame assembly (lower portion of connecting portion). The first fixing portion corresponds to the second fixing portion to provide a connection between the connecting portion

and the frame assembly. Weaver however fails to teach that the first fixing portion is shaped as a concave groove or a convex protrusion and that the second fixing portion is shaped as a corresponding concave groove or convex protrusion. The fixing portions of Weaver are not convex or concave but are rectangular. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use convex or concave fixing portions because Applicant has not disclosed that convex or concave fixing portions provide an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the shape as taught by Weaver or the claimed convex/concave shape because both shapes perform the same function of providing a connection between the connecting portion and the frame assembly equally well. Therefore, it would have been obvious to one of ordinary skill in the art to modify Weaver to obtain the invention as specified in claims 21 and 22.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver ('321) or Best ('263) as applied to claim 1 above in view of Ohta et al. (USPN 6859975).

Weaver or Best teaches all the essential elements of the claimed invention however fail to teach that a button (claim 6) disposed at a position corresponding to a handle groove (claim 7) on the main body of the vacuum cleaner, wherein the button is integrally formed with a connecting projection so that the connecting projection moves together with the button (claim 8). Also that there is a connecting recess that is slanted (claim 9) disposed in the frame body of the frame assembly shaped and dimensioned to correspond to the connecting projection (claim 8). Weaver and Best both teach a handle groove (68, 62 respectively) disposed at a top portion of the main body of the vacuum cleaner. Ohta teaches a vacuum cleaner with a removable canister cover.

The cover comprises a button (48) located at the top portion of the cover that is integrally formed with a connecting projection (vertical extension of 48b that engages 1a, see figures 3-4 and col. 7, lines 1-4) that moved together with the movement of the button. There is a connecting recess (1a, col. 7, lines 1-4) disposed in the frame body of the frame assembly shaped and dimensioned to correspond to the connecting projection. The connecting recess is slanted (1a, figure 3 shows a portion of 1a that is slanted at a downward angle). Ohta's handle (47a) comprises a handle recess that corresponds to the button operation of the main body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Weaver and Best's main body to include a quick release button corresponding to the handle groove as taught by Ohta so that the main body can be released from the frame assembly with a one handed operation for quick use when cleaning tight spaces that are not feasible for the nozzle.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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